

# Helping Iraq

**LSA ANACONDA, Iraq** --- A middle-aged Iraqi man wipes the tears streaming down his face with a cloth handkerchief as he watches the transformation of his son with pride.

His son, 12 years old, sits calmly as he observes the reflection looking at him in a small, hand-held mirror.

What he sees, in essence, is his new face to the world.

The unidentified boy's life was changed in March when he lost one of his eyes from a gunshot wound he received while going to purchase propane with his uncle.

While at the propane factory, the boy was allegedly shot by an Iraqi National Guard Soldier by mistake, the boy's father said.

A single bullet entered the boy's forehead, just above his right eye. It passed through the boy's eye socket, cheek cavity, mouth, and exited through his chin.

"It doesn't matter to me if it was a mistake or not," said the boy's father through the help of a translator. "It happened, and it is devastating either way."

At the time of the life-threatening injury, the boy's family brought him to Anaconda to receive medical aid. He went through an initial emergency surgery which saved his life, said Lt. Col. Mark L. Nelson, M.D., chief of ophthalmology for the Air Force hospital here.

Nelson from Ft. Lewis, Wash., of the 207th medical team, 22nd Medical Battalion, didn't perform the operation, but explained that his predecessor helped reconstruct the boy's face.

Today, the boy's face shows little sign of the damage inflicted by the gunshot. Through surgeries his cheek and jaw line have been repaired, and almost the only sign of injury are his missing bottom teeth, and now the addition of a slightly different-colored right prosthetic eye.

Because LSA Anaconda offers medical assistance to Iraqi citizens in critical need, this boy has been treated and received aid he would otherwise have no way of getting.

The making of prosthetic eyes, a joint effort within the medical community here, is headed by Capt. Christian K. Olson, of Riley, Kan., the chief of optometry for the 61st Multifunctional Medical Battalion.

The program, started by Olson's predecessor, is volunteer-run and completed after the doctors' normal duty hours.

Olson, with the help of surgeons and dentists, has created more than six prosthetic eyes for children, and approximately ten for adults during his year here, he said.

The replacement of an eye starts with the labor of trauma surgeons on the operating table, and ends months later after healing, when patients go home with a new eye.

"Never in my wildest dreams did I imagine that I would be here in Iraq making eyes," said Olson. But he is doing just that.

Olson said he had never made prosthetic eyes in the States, having only taken a prosthetic elective in optometry school, but made his first here.

The process of making eyes is about a six-hour procedure from start to finish, Olson said, but the road to recovery can start months prior. The first step to see a patient is a surgeon, as the patient usually comes to Anaconda shortly after being injured.

"Most injuries are improvised explosive device fragments," said Nelson. He sees an average of one patient per night. His emergency trauma patients are usually air evacuated in between 1 and 3 a.m. if they are Soldiers. Approximately three-fourths of the patients he sees are Iraqi citizens though, for various reasons.

Foremost, Iraqi Army soldiers and police suffer frequent eye injuries because they cannot afford eye protection, Nelson said. Next, Iraqi citizens who have either been injured due to Iraqi, U.S., or insurgent combat are helped. Occasionally, insurgents that U.S. troops have wounded are operated on too, although the surgeons aren't given their identity, he said.

"Really, we don't turn people down as long as we have the resources," Nelson said.

Nelson said the criteria for keeping or taking out an eye rests on the patient's ability to detect light. If a patient has any vision left at all they eye will be kept, but if there is no light perception, there is almost no chance for recovery, he said.

Reasons for an eye to be enucleated, or taken out, would be if the eye is determined useless, if it's going to become painful later on, or to prevent a condition called sympathetic ophthalmia.

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**See Surgery, Page**

*(Left) An Iraqi man injured in an IED blast tries out his new prosthetic eye for the first time, July 20.*



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**Army doctors volunteer time, expertise to improve the quality of life for Soldiers, civilians**

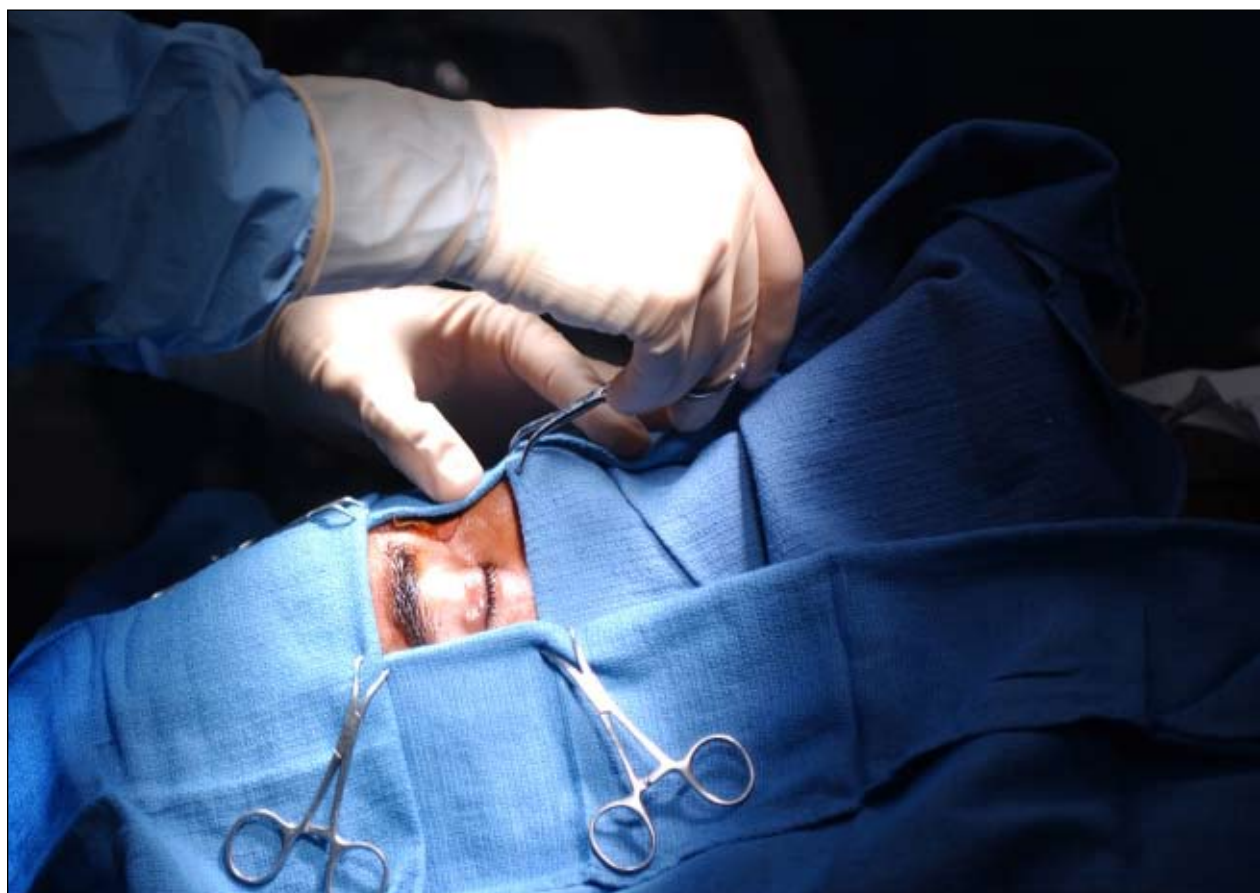
**story and photos by Spc. Alexandra Hemmerly-Brown**  
**210th Mobile Public Affairs Detachment**



*(Above) The laboratory technician gets everything ready for an enucleation surgery. (Left) Capt. Christian K. Olson holds up a mirror for a young Iraqi boy to get his first look at himself with a new prosthetic eye.*



*Capt. Christian K. Olson prepares a young Iraqi boy's eye for its new prosthesis*



*An enucleation patient is prepared for surgery at LSA Anaconda.*



## Surgery, from Page 10

Sympathetic ophthalmia is a rare but serious medical condition that occurs when the immune system gets confused and begins to reject a patient's good eye rather than the injured eye, Nelson said. This could potentially result in the loss of both eyes which would be devastating for the patient.

In these cases, it is better to remove the injured eye, in order to give the patient a better quality of life, Nelson said. His goal when

performing an enucleation is to preserve as much of the eye muscle as possible.

"I make an incision, cut the muscles away from the eye, and then cut the optic nerve," he said.

If the patient is going to receive a prosthetic eye, Nelson then implants a round ball to hold the socket's shape, and ties the preserved muscle over the ball to hold it in place.

"If we didn't put that sphere in, there would be this big empty space that would just collapse or sink in," Nelson said.



**Capt. Christian K. Olson removes the transplant that was holding a place for this young Iraqi boy's new prosthetic eye.**



**A young Iraqi boy smiles for the camera as his father looks on after receiving a new prosthetic eye.**

When the surgery, which can take anywhere from 45 minutes to seven hours to complete, is over, the patient will wait six weeks before returning to have a mould cast of their eye.

Nelson, who is the only eye surgeon on Anaconda and is on call 24 hours per day, said that Soldiers who have a condition that may be better treated elsewhere are immediately sent back to the U.S. where sources aren't limited.

For those that are treated at Anaconda though, Olson is called to start work on making the patient a new eye, he said. The plastic disk is left in the eye for about a month before Olson makes an initial impression of the eye socket.

This is when Olson turns to the dentist's office for help, because he uses their materials to hand-make the eyes.

"I use dental impression material, much like a dentist would use to make an impression of the mouth," he said.

Olson goes on to make a wax eye first, then finally an acrylic eye that will be custom and form-fitting to each individual, he said. Each eye is hand-painted, copying as closely as possible the appearance of the patient's natural eye.

"The paint that we use is actually dry, powdered paint that is mixed with glue. Dot by dot the paint is applied to a little plastic disk, and we are able to create the illusion of depth," said Olson.

When the prosthesis (false eye), which is

a half-circle, is finished, the patient returns to Anaconda for the final fitting. The prosthesis is placed on top of the original ball that was inserted during surgery. The two disks work in conjunction with each other to retain as much normal eye function as possible while making the patient look as cosmetically normal as possible.

"At first when the surgery is done, naturally the people are quite devastated," Olson said. "They are saddened by their loss and they are trying to learn and function and get along with one eye. So by the time I am able to make an eye for them and get them cosmetically looking better, they are absolutely excited."

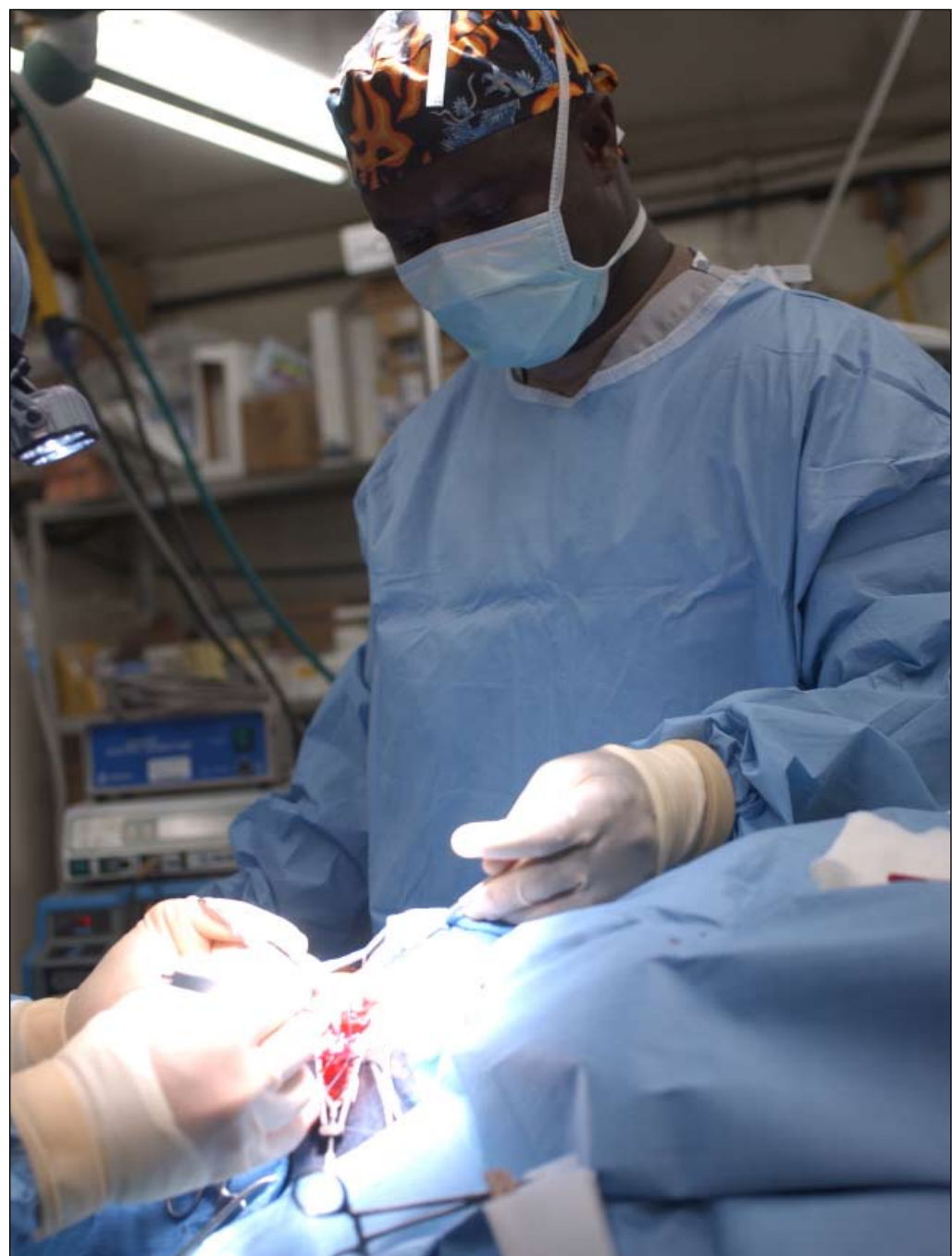
This was true of the unidentified Iraqi boy as he received his new eye July 25. After examining his eye, he hugged his father while his father shook the doctors' hands in thanks.

"This has been one of the most rewarding parts of being here in Iraq," Olson said. "I enjoy helping Soldiers see better, but this is something special that I normally would never have the opportunity to do," he said.

Olson said that when his deployment is over, he hopes his successor will continue the program he's started. For now, Soldiers as well as Iraqi citizens are reaping the benefits of the U.S. military's generosity.

One Iraqi boy will now face a future unafraid of being ostracized in his own community.

"Thank you. If I didn't bring my son here, he would have died," the boy's father said.



**Spc. Adomako Adjapong helps conduct an enucleation procedure at LSA Anaconda.**